## REMARKS

Claim 1 is amended to correct a grammatical error of a self-evident nature. No new matter is added.

The Examiner rejected claims 1, 2, 7, and 11 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,710,772 to Sato. "[A] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Sato fails to disclose every element of claim 1.

Claim 1 recites a method of classifying a received data frame as belonging to one of a plurality of possible classes, each class having a corresponding format wherein a known bit pattern is located in a different position in the frame. Sato discloses a system for discontinuous transmission (DTX) of digital speech signals in a wireless communication system. When speech is present, a mobile terminal transmits the digitally encoded speech in a 324-bit data frame, the structure of which is depicted in FIG. 1(b). See col. 3, lines 38-43. During periods when no speech is present, the mobile terminal transmits a 68-bit data frame containing only guard bits and two synch patterns, as depicted in FIG. 1(c). See col. 3, lines 43-52. Sato uses the data frame length to determine whether speech is present or not. See FIG. 5, decision block S202, and col. 6, lines 16-23:

> [T]he TDMA processor 16 and the main controller 21 judge whether the uplink signals represent a time slot in an active speech period or one in a silent period (step S202). This judgment is based on whether the data length of the time slot is 324 bits or 68 bits. Thus, if the data length of the time slot is 324 bits, the time slot is an active speech period, or if it is 68 bits, the period is a silent one (See FIGS. 1 (b) and (c)).

The Examiner has conflated the bit length of these two data frames with the claimed known bit pattern. As understood by those of skill in the art, the latter refers to a known pattern

of 1's and 0's – that is, a known data pattern – not the length of a data frame. This usage is clear in Applicants' Specification, for example, at p. 6, lines 2-13:

> On the other hand, it is the differing location of the CDVCC sub-field within the normal burst 10 and the truncated burst 12 that is exploited by the present invention to achieve a DTX detection with a high success probability, even under low C/I conditions. The CDVCC is a unique 12-bit code word used to identify the base station (or sector thereof) that is handling a call for a mobile terminal. The CDVCC is communicated to the mobile terminal at the call initiation (or handoff) and the mobile terminal returns the CDVCC in its uplink transmissions. The CDVCC is hence a known value, depicted in Figure 1 as the Reference value, CDVCC_R 40. According to the present invention, the CDVCC_R 40 is compared to up to two positions of a received burst 14 – the bit positions corresponding to the CDVCC_N 26 in a normal burst 10, and optionally the bit positions corresponding to the CDVCC_T 38 in a truncated burst 12. Comparison of these bits yield the quantities D1 and D2, respectively, as described more fully herein.

244 of the 324 bits in the Sato data frame of FIG. 1(b) are DATA. By definition, encoded speech DATA are not a known bit pattern – if the bit pattern were known, there would be no need to transmit it! Only the allowed data frame lengths are known.

This meaning of the phrase "known bit pattern" is clear considering a further limitation of claim 1, "computing a first value representing a confidence-weighted correlation between said known bit pattern and data from a first position of said frame." Under the Examiner's interpretation, this would comprise correlating the calculated length of a data frame to data in a particular position in the frame. Such a correlation could only possibly yield a meaningful value if the length of the data frame were a field of the data frame. While it is certainly known to transmit the length of a data frame, e.g., as part of a header in the frame, no receiver calculates the length of the received data frame and compares the calculated length to the length field – it simply reads this value from the field (which is why it is there). In any event, Sato clearly depicts that the length of a data frame is not a field in either data frame of FIGs 1(b) and 1(c). Accordingly, it would be completely meaningless for Sato to correlate the length of the data frame (that is, the value 68 or 324) with data from any particular position in the frame.

Still further, claim 1 recites computing a confidence-weighted correlation between a known bit pattern and data in a particular position in the frame. Sato is completely silent as to any correlation operation at all, and in particular regarding a confidence-weighted correlation. The Examiner stated, "wherein the calculated value 68 bits or 324 bits representing a confidence-weighted correlation, a silent period or active speech period." However, the Examiner previously stated "known bit pattern is 324 bits" and "known bit pattern is 68 bits." If the value 68 or 324 is a "known bit pattern" (which it is not; see above) it cannot simultaneously be a confidence-weighted correlation of a known bit pattern with data from a particular position in the frame. That is, a value cannot be both a known bit pattern and a value representing a correlation of itself with other data.

Sato fails to disclose correlating a known bit pattern with data from a particular position within a data frame, and determining the class of the data frame based on the correlation. Accordingly, claim 1 exhibits patentable novelty over the art of record. Claims 2, 7, and 11 depend from claim 1 and include all limitations thereof, and accordingly also define patentably over Sato. All pending claims being patentable over the art of record, prompt allowance thereof is respectfully requested.

Respectfully submitted,

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